

***What is Claimed Is:***

1. An inclining trailer, comprising:

a bed;

a hitch attached to said bed;

at least one wheel support arm having a first end in pivotal engagement with said bed and a second end operatively engaged with an axle for a wheel;

said at least one support arm having a first position relative to said bed wherein said bed is substantially level and said at least one support arm having at least one other position

wherein said bed is inclined; and

an actuator, said actuator being engaged with said at least one support arm and with said bed such that said actuator mediates travel of said support arm between said first position and said at least one other position.

2. The trailer according to claim 1, wherein said hitch is a tongue-type hitch.

3. The trailer according to claim 1, wherein said hitch is a gooseneck-type hitch.

4. The trailer according to claim 1, wherein a portion of said bed forms a reverse beaver tail.

5. The trailer according to claim 1, wherein said actuator is a pneumatic actuator.

6. The trailer according to claim 1, wherein said actuator is a linear drive motor.

7. The trailer according to claim 1, wherein said actuator is a hydraulic actuator.

8. The trailer according to claim 7, further comprising a hydraulic pump operatively mounted on said frame.

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9. An inclining trailer having a front and a rear, comprising:

a frame having a first side member, a second side member, and at least one cross-member interconnecting said first side member and said second side member;

a hitch attached to said frame at the front;

10 a rotating member pivotally connected to said frame between the front and the rear,

said rotating member having a first end, and a second end;

a first wheel support arm operatively connected to said first end of said rotating member, said first wheel support arm having a proximate end and a distal end;

15 a second wheel support arm operatively connected to said second end of said rotating member, said second wheel support arm having a proximate end and a distal end;

an axle located at said distal end of each wheel support arm;

a wheel operatively connected to each axle;

20 an actuator for rotating said rotating member, said actuator operatively engaged with at least one of said wheel support arms and with said frame, whereby said frame is correspondingly inclined or declined; and

at least one shoe for ground engagement located vertically below said frame and longitudinally between said wheels and the front.

10. The trailer according to claim 9, wherein said at least one shoe is operatively connected to said frame.

11. The trailer according to claim 9, wherein said at least one shoe is integral with at least one of said first and second wheel support arms.

12. The trailer according to claim 9, wherein said at least one shoe is operatively connected to said rotating member.

13. An inclining and elevating trailer having a front and a rear, comprising:

a frame having a first side member, a second side member, and at least one cross-member interconnecting said first side member and said second side member;

a hitch pivotally attached to said frame at the front;

a rotating member pivotally connected to said frame between the front and the rear,

said rotating member having a first end and a second end;

a first wheel support arm operatively connected to said first end of said rotating member, said first wheel support arm having a proximate end and a distal end;

a second wheel support arm operatively connected to said second end of said rotating member, said second wheel support arm having a proximate end and a distal end;

an axle located at said distal end of each wheel support arm;

a wheel operatively connected to each axle; and

at least one actuator operatively connected to one of said wheel support arms for rotating said rotating member, whereby said frame and said bed are correspondingly elevated, inclined or declined.

14. The trailer according to claim 13, wherein said hitch is a tongue-type hitch.

15. The trailer according to claim 13, wherein said hitch is a gooseneck-type hitch.

5 16. The trailer according to claim 13, wherein said at least one actuator includes a first pair of actuators operatively connected to said first and second wheel support arms and a second pair of actuators operatively connected to said hitch.

17. The trailer according to claim 16, wherein said actuators are pneumatic.

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18. The trailer according to claim 16, wherein said actuators are linear drive motors.

19. The trailer according to claim 16, wherein said actuators are hydraulic.

15 20. The trailer according to claim 19, further comprising a hydraulic pump operatively mounted on said frame.

21. An inclining and elevating trailer having a front and a rear, comprising:

a frame having a first side member, a second side member, and at least one cross-member interconnecting said first side member and said second side member;

a hitch pivotally attached to said frame at the front;

5 a rotating member pivotally connected to said frame between the front and the rear, said rotating member having a first end and a second end;

a first wheel support arm operatively connected to said first end of said rotating member, said first wheel support arm having a proximate end and a distal end;

10 a second wheel support arm operatively connected to said second end of said rotating member, said second wheel support arm having a proximate end and a distal end;

an axle located at said distal end of each wheel support arm;

a wheel operatively connected to each axle;

15 at least one actuator operatively connected to one of said wheel support arms for selectively rotating said rotating member, whereby said frame and said bed are correspondingly elevated, inclined or declined; and

at least one pressure sensor operatively connected to said frame.

22. The trailer according to claim 21, further comprising a management controller operatively connected to said at least one pressure sensor.

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23. An inclining and elevating trailer having a front and a rear, comprising:

a frame having a first side member, a second side member, and at least one cross-member interconnecting said first side member and said second side member;

a bed operatively attached to said frame;

5 a hitch pivotally attached to said frame at the front, said hitch including a first connecting flange and a second connecting flange;

a tube pivotally connected to said frame between the front and the rear, said tube having a first end and a second end;

10 a first wheel support arm operatively connected to said first end of said tube, said first wheel support arm having a proximate end and a distal end;

a second wheel support arm operatively connected to said second end of said tube, said second wheel support arm having a proximate end and a distal end;

an axle located at said distal end of each wheel support arm;

a wheel operatively connected to each axle;

15 a first mounting member operatively attached to said frame;

a second mounting member operatively attached to said frame;

a first actuator having one end operatively connected to said first connecting flange and the other end operatively connected to said first mounting member;

20 a second actuator having one end operatively connected to said first mounting member and the other end operatively connected to said first wheel support arm;

a third actuator having one end operatively connected to said second connecting flange and the other end operatively connected to said second mounting member; and

a fourth actuator having one end operatively connected to said second mounting member and the other end operatively connected to said second wheel support arm.